E-Resources on the topic of
"COST ACCOUNTING 1"

For Students of 2ND Semester,
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The University of Calcutta

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Study Material on Marginal Costing

1. Introduction to Marginal Costing

Marginal costing is a cost accounting technique that helps businesses make decisions regarding product pricing, cost control, and profit planning. It focuses on the **marginal cost**, which is the additional cost incurred by producing one more unit of a good or serviceThe key components of marginal costing are:

- **Marginal Cost (MC)**: The cost incurred to produce one additional unit of output.
- **Fixed Costs**: Costs that do not change with the level of output.
- **Variable Costs**: Costs that change directly with the level of output.

2. Key Concepts in Marginal Costing

- **Fixed Costs (FC)**: These are the costs that remain constant regardless of the level of production or sales. Examples include rent, salaries of permanent employees, and depreciation of machinery.
- **Variable Costs (VC)**: These are the costs that vary in direct proportion to the level of production or sales. Examples include raw material costs, direct labor, and utility costs used in production.
- **Contribution Margin**: The contribution is the difference between the selling price per unit and the variable cost per unit. It contributes towards covering the fixed costs and generating profit.
  Contribution = Selling Price per Unit – Variable Cost per Unit
- **Break-Even Point (BEP)**: This is the level of output or sales at which total revenue equals total costs (both fixed and variable), resulting in no profit or loss. **BEP (in units) = Fixed Costs / Contribution per Unit**
- **Profit Planning**: Marginal costing helps in determining the profit or loss at different levels of sales by focusing on the contribution margin.

3. Marginal Costing Formulae

- **Total Cost (TC)** = Total Fixed Costs (FC) + Total Variable Costs (VC)
- **Contribution per Unit** = Selling Price per Unit – Variable Cost per Unit
- **Break-Even Point (BEP) in Units** = Fixed Costs / Contribution per Unit
- **Margin of Safety** = Actual Sales – Break-Even Sales
- **Profit** = (Sales – Variable Costs) – Fixed Costs

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4. Marginal Costing vs. Absorption Costing

- **Marginal Costing**: Only variable costs are considered when determining the cost of a product. Fixed costs are treated as period costs and are not allocated to the product.
- **Absorption Costing**: Both fixed and variable costs are included in the cost of a product. Fixed costs are absorbed into the cost of production and allocated to each unit produced.

Key Differences:

Aspect	Marginal Costing	Absorption Costing
Treatment of Fixed Costs	Treated as period costs	Allocated to each unit
Profit Reporting	Profits fluctuate with changes in production volume	Profits may be affected by inventory changes
Costing of Inventory	Does not include fixed costs	Includes both fixed and variable costs

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5. Applications of Marginal Costing

1. **Pricing Decisions**: Marginal costing helps businesses set prices that cover the variable costs and contribute towards fixed costs. It is particularly useful for businesses with fluctuating demand or in competitive markets.
2. **Cost Control**: Managers can use marginal costing to identify how much each product contributes to covering fixed costs and profit. This helps in controlling variable costs and improving efficiency.
3. **Break-Even Analysis**: By determining the BEP, businesses can evaluate the minimum sales needed to avoid a loss and plan accordingly.
4. **Profit Planning and Forecasting**: Marginal costing helps businesses forecast their profits by considering the contribution margin and assessing how different levels of sales affect profit.
5. **Make or Buy Decisions**: When deciding whether to produce a good internally or buy it from an external supplier, marginal costing can help compare the costs involved.

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6. Numerical Problems on Marginal Costing

Example 1: Contribution per Unit and Break-Even Point

A company produces a product with the following data:

- Selling Price per Unit = ₹100
- Variable Cost per Unit = ₹60
- Fixed Costs = ₹40,000

Calculate:

- Contribution per Unit
- Break-Even Point in Units

Solution:

- Contribution per Unit = Selling Price per Unit – Variable Cost per Unit
  Contribution per Unit = ₹100 – ₹60 = ₹40
- Break-Even Point in Units = Fixed Costs / Contribution per Unit
  BEP = ₹40,000 / ₹40 = 1,000 units

Example 2: Profit Calculation at Different Sales Levels

Given:

- Selling Price per Unit = ₹120
- Variable Cost per Unit = ₹70
- Fixed Costs = ₹50,000
- Sales = 2,000 units

Calculate the Profit.

Solution:

- Contribution per Unit = ₹120 – ₹70 = ₹50
- Total Contribution = 2,000 units × ₹50 = ₹100,000
- Profit = Total Contribution – Fixed Costs
  Profit = ₹100,000 – ₹50,000 = ₹50,000

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7. Advantages of Marginal Costing

- **Simplicity**: It is easy to understand and apply, especially for small businesses.
- **Helps in Decision Making**: Facilitates better pricing, make-or-buy, and product mix decisions.
- **Cost Control**: It emphasizes controlling variable costs to improve profitability.
- **Profitability Analysis**: Offers a clear picture of how sales volumes impact profit through the contribution margin.

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8. Limitations of Marginal Costing

- **Not Suitable for Long-Term Decision Making**: It is more useful for short-term decision-making since fixed costs are treated as period costs and are not allocated to individual products.
- **Over-Simplified**: It ignores certain complex cost structures that may be relevant in some industries.

- **Difficult in Practice**: In some businesses, it is difficult to segregate fixed and variable costs accurately.

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9. Conclusion

Marginal costing is a useful tool for understanding how costs behave and how they affect the profitability of an organization. It is particularly beneficial for decision-making, especially in situations where managers need to make quick decisions related to pricing, production levels, and profitability.

Suggested Practice Questions:

1. Calculate the break-even point for a company with the following information: Selling price per unit ₹200, variable cost per unit ₹120, and fixed costs ₹60,000.
2. A company has fixed costs of ₹80,000. If the contribution per unit is ₹50 and the selling price is ₹100, calculate the break-even point in sales value.
3. If a company sells 5,000 units with the following details, calculate its profit:
    - Selling Price per Unit = ₹250
    - Variable Cost per Unit = ₹150
    - Fixed Costs = ₹1,00,000